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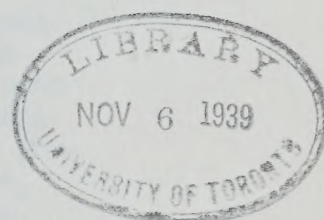
REPORT

On

ANNUAL HIGHWAY

COSTS

Province of Ontario



Made To

THE ROYAL COMMISSION

On

HIGHWAY TRANSPORT

By

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June 11th, 1938.

Submitted on behalf of

AUTOMOTIVE TRANSPORTATION ASSOCIATION
OF ONTARIO

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auth'd by Professor Jackson

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ROYAL COMMISSION

on

HIGHWAY TRANSPORT

Part 5 of the Order-in-Council of August 26, 1937, as amended October 13, 1937, and April 28, 1938 reads as follows:

5. To investigate, by the consideration of such written briefs or memoranda, as may be submitted by interested parties, and report upon the annual cost of constructing, maintaining and administering all public roads in the Province of Ontario and the contributory cost, direct or otherwise, by the municipalities affected, and to what extent the cost of such public roads should be met by the owners and operators of such motor vehicles.

This paragraph calls for an answer to three questions:

- I. The annual cost of constructing, maintaining and administering all public roads in the Province of Ontario;
- II. The contributory cost, direct or otherwise, by the municipalities affected;
- III. To what extent the cost of such roads should be met by the owners and operators of such motor vehicles.

It will be convenient first to deal with Questions I and II.

The answers to these questions compiled from the memorandum of the Department of Highways (qq. 42 and 43) are summarized as follows:

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Total Cost 1921 to 1937 inclusive

<u>By Province</u>	<u>Construction</u>	<u>Maintenance</u>
King's Highways	\$ 96,452,667	\$ 27,183,334
County Roads	36,714,670	18,404,605
Township and Indian Reserve Roads	8,569,398	12,647,486
Colonization Roads	4,295,755	3,434,995
Northern Development Roads less Federal Subsidies	<u>67,457,254</u> \$213,489,744	<u>23,220,968</u> \$84,891,388
<u>Contributory Costs</u>		
By Counties	39,769,127	18,847,704
By Township and Indian Reserves	20,259,877	22,851,818
By Colonization Townships	<u>1,948,220</u> <u>61,977,224</u>	<u>1,298,813</u> <u>42,998,335</u>
Total Cost	<u>\$275,466,968</u>	<u>\$127,889,723</u>
Average Cost per year	<u>\$ 16,779,713</u>	<u>\$ 7,799,023</u> <u>\$24,578,736</u>
Average Cost per year omitting Northern Development and Colonization Roads	\$ 12,290,907	\$ 6,087,408 \$18,378,315

Distribution of Cost of Northern Ontario Roads

It is submitted that the cost of roads in Northern Ontario calls for distribution on principles which do not pertain in Southern Ontario. Northern Ontario is a vast area of great distances with extensive mineral and timber resources. A great deal of the road-expenditure in Northern Ontario is made for no other purpose than to afford access to mines, mining areas and timber resources, and to connect them with the T. & N.O. Railway.

Table 1. Summary of Expenditures

Expenditures		Receipts	
By Private		By Private	
State's Highway	1,000,000	State's Highway	1,000,000
County Roads	100,000	County Roads	100,000
Township and Indian	50,000	Township and Indian	50,000
Indian Roads	25,000	Indian Roads	25,000
Colonization Roads	10,000	Colonization Roads	10,000
Indian Development	5,000	Indian Development	5,000
Indian Loan Federal	1,000,000	Indian Loan Federal	1,000,000
Subsidies	1,000,000	Subsidies	1,000,000
<u>Grand Total</u>		<u>Grand Total</u>	
By Counties	10,000,000	By Counties	10,000,000
By Township and	10,000,000	By Township and	10,000,000
Indian Reserves	10,000,000	Indian Reserves	10,000,000
By Colonization	1,000,000	By Colonization	1,000,000
Townships	1,000,000	Townships	1,000,000
<u>Total Receipts</u>		<u>Total Receipts</u>	
10,000,000	10,000,000	10,000,000	10,000,000
Average Road per year	10,000,000	Average Road per year	10,000,000

Table 2. Summary of Expenditures

It is estimated that the cost of road building in the United States is \$1,000,000,000 per year. This is a very large sum of money, and it is not surprising that the government has been unable to raise enough money to build the roads that are needed. The government has tried to raise money by selling bonds, but this has not been successful. The government has also tried to raise money by increasing taxes, but this has also been unsuccessful. The government has been unable to raise enough money to build the roads that are needed, and this is a very serious problem. The government has been unable to raise enough money to build the roads that are needed, and this is a very serious problem. The government has been unable to raise enough money to build the roads that are needed, and this is a very serious problem.

Large revenue is received by the Province from the mines and timber areas thus developed. This revenue, which would not be available without the expenditure on the roads in question, should be credited against the development in question. Next should be credited moneys received by way of special grants from the Dominion Government. Thirdly, should be credited the revenue from highway taxes collected in Northern Ontario. The balance of the annual expenditure should, it is submitted, be paid, as is the case to-day, by the Province generally (R.S.O. 1937, Ch. 34, S. 9), there being no equitable principle upon which the balance of these costs can be charged to one class of citizen in Southern Ontario.

A large part of the expenditure on the roads in Northern Ontario is by way of relief work which should obviously be borne by the Province generally.

The policy of the Province is to forbid commercial vehicles owned in Southern Ontario to enter Northern Ontario or otherwise to compete with the government-owned T. & N.O. Railway. It is obviously inequitable that any portion of the cost of roads in the forbidden part of the Province should be assessed against those forbidden to enter.

Certain classes of P.C.V. vehicles are licensed to use limited sections of highway in Southern Ontario averaging in the vicinity of 150 miles each. It is obviously inequitable that they should be charged with any of the cost of roads in Northern Ontario.

When the task of rehabilitating the highways was inaugurated in 1919 there was a vast area to cover. In the 18 years since that date a great part of the necessary capital reconstruction has been done. It is obvious that the programme for the future is likely to diminish rather than increase.

For this reason it has been considered proper to take the programme of the last 5 years with the view of determining the probable fair average cost per year for the next 5-year period.

On this basis the average cost per year would be as shown hereunder:

Total Cost 1932 to 1937 5 yrs. 5 mos.

<u>By Province</u>	<u>Construction</u>	<u>Maintenance</u>
King's Highway	\$23,460,720	\$ 8,197,495
County Roads	5,872,554	6,402,613
Township and Indian Reserve Roads	2,275,077	5,733,436
Colonization Roads	957,348	825,578
Northern Development Roads less	<u>55,704,918</u>	<u>8,762,013</u>
Federal Subsidies	\$88,270,617	\$29,921,135

Contributory Costs

By Counties	6,743,975	5,456,414
By Townships and Indian Reserves	4,149,094	6,787,374
By Colonization Townships	<u>537,365</u>	<u>358,243</u>
	<u>\$11,430,434</u>	<u>\$12,602,031</u>

Total Cost	<u>\$99,701,051</u>	<u>\$42,523,166</u>
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Average Cost per year	<u>\$18,406,327</u>	<u>\$ 7,850,430</u>	<u>\$26,256,757</u>
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Average Cost per year omitting Northern Development and Colonization Roads	<u>\$ 7,846,416</u>	<u>\$ 6,014,277</u>	<u>\$13,860,693</u>
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For this month the average cost per unit would be as shown

1940-1941

Amounts shown in 1941 & 1942

By Government	Contribution	1940-1941
King's Highway	1,000,000	1,000,000
County Roads	1,000,000	1,000,000
Township and Indian Reserve Roads	1,000,000	1,000,000
Colonial Roads	1,000,000	1,000,000
Indian Roads	1,000,000	1,000,000
Federal Subsidies	1,000,000	1,000,000
Contributions from		
by Government	1,000,000	1,000,000
by Townships and Indian Reserves	1,000,000	1,000,000
by Colonization	1,000,000	1,000,000
by Townships	1,000,000	1,000,000
Total	1,000,000	1,000,000
Average cost per unit	1,000,000	1,000,000
1940-1941	1,000,000	1,000,000
1941-1942	1,000,000	1,000,000

The remaining question propounded by Paragraph 5 of the Order-in-Council is:

AND TO WHAT EXTENT THE COST OF
SUCH PUBLIC ROADS SHOULD BE MET
BY THE OWNERS AND OPERATORS OF SUCH MOTOR VEHICLES

It is submitted that the motor vehicle owner as a class in Southern Ontario is more than paying his fair share of the cost of constructing, maintaining and administering the roads. This appears from the following calculation, which is based on the answers given by the Highways Department to Questions 42 and 43.

Total expenditures covering construction, maintenance and administration of King's Highways and subsidies to counties and townships under the Highway Improvement Act by the Province of Ontario from 1920 to March 31, 1937, inclusive. (Southern Ontario Area)	\$204,081,782.00
Allowance for interest on expenditures in excess of revenue for same period @ $4\frac{1}{2}\%$ per annum	<u>36,355,336.00</u>
	\$240,437,118.00
Less total receipts from registration fees gasoline tax, etc. after deducting proportion received from Northern Ontario Area	<u>210,277,512.00</u>
Balance of 17 year expenditures and interest as yet unpaid for	\$ 30,159,605.00

For the 5 years ending March 31, 1937 the average annual receipts from highway taxes in Southern Ontario exceeded the average annual expenditures in that area by \$12,330,432.00 per year.

This means that if the same ratio of receipts to expenditures is maintained for the next three years the revenue from fees and gasoline tax provided by motor vehicle owners in Southern Ontario will have completely repaid to the Province the total cost of construction, maintenance and administration of all roads in this area from 1920 to 1937 together with interest at $4\frac{1}{2}\%$ per annum on all expenditures in excess of revenue during that period.

The same conclusion, namely, that the motor vehicle owner is more than paying his fair share, is reached by another approach.

The remaining question is provided by paragraph 5 of the

Order-in-Council is:

It is that the cost of
the construction and maintenance of the
highway system in the Province

It is submitted that the motor vehicle owner as a class
in Southern Ontario is more than paying his fair share of the cost
of construction, maintenance and administration of the roads. This ap-
pears from the following calculation which is based on the figures
given by the Highway Department for the year 1957-58.

Total expenditures covering construction, main-
tenance and administration of the Highway
Department in Ontario and Township roads
the Highway Department and the Province
of Ontario from 1950 to 1957, in-
clusive. (Southern Ontario area)
\$100,000,000.00
Allocation for interest on expenditure in
excess of revenue for same period 4.1%
\$4,100,000.00
\$104,100,000.00

Less total receipts from taxation, fees,
grants and other sources
\$20,000,000.00
Balance of 17 per cent expenditure and interest
on the total cost for
\$18,410,000.00

For the 5 years ending March 31, 1957 the average annual
receipts from highway taxes in Southern Ontario amounted to the average
annual expenditures in that area by \$18,410,000.00 per year.

This means that if the average of receipts to ex-
penditures is maintained for the next three years the motor vehicle owner
and taxpayer will provide by motor vehicle owner in Southern Ontario
will have nearly double receipts to the Province the total cost of con-
struction, maintenance and administration of all roads in this area
from 1950 to 1957 together with interest at 4.1% per annum on all ex-
penditures in excess of revenue during that period.

The same calculation, namely, that the motor vehicle owner
is more than paying his fair share, is reached by another approach.

The Public Accounts of the Province show an investment in King's Highways and in other rural roads in Southern Ontario of \$153,179,587.92. The following table indicates to what extent the motor vehicle owner in Southern Ontario is reimbursing the Province on an amortization basis using rates set up in the report prepared by Breed et al:

Total Revenue from Registration Fees, Gas Tax, etc. in Southern Ontario for year ending March 31st, 1937	\$ 24,015,273.00
Deduct:	
1. Maintenance and all Administration Costs for year ending March 31st, 1937	4,931,306.65
2. 4.55% Interest on Investment of \$153,179,587.92 for year.	6,969,671.25
3. Sinking Fund provision on basis of 4% of Investment of \$153,179,587.92	<u>6,127,183.48</u>
	<u>18,028,161.38</u>
4. Surplus Revenue for year ending March 31st, 1937	<u>\$ 5,987,111.62</u>

From the above figures it is apparent that on the present scale of fees and gas tax, the motor vehicle owner in Southern Ontario, paid the Province in the year ending March 31st, 1937, a Surplus almost \$6,000,000.00 after paying all maintenance and administration charges for the year in this District, interest on Investment at 4.55% and a Sinking Fund of 4% on the Investment to retire the debt creating it.

It is submitted, however, that above statement does not reflect a true picture of current conditions. The interest rate should be the current rate payable by the Province of $3\frac{1}{4}\%$, and the sinking fund should be set up on a 3% basis and apply only on that portion of the investment which is depreciable. Adjusted the statement would be as follows:

Total Revenue from Registration Fees, Gasoline Tax, etc., in Southern Ontario for year ending March 31st, 1937 24,015,273.00

Deduct:

1. Maintenance and all Administration Costs for year ending March 31st, 1937 4,931,306.65
2. $3\frac{1}{4}\%$ Interest on Investment of \$153,179,587.92 for year 4,978,336.58
3. Depreciation on basis of 3% annually on depreciable content which is 51% of above investment of \$153,179,587.92 2,343,647.68 12,253,291.00
4. Surplus Revenue for year ending March 31st, 1937 \$11,761,982.00

The Public Accounts show that the total Highway and Road Investment of the Province for the past five years stood as follows:

October 31st, 1931 -	\$162,662,257.49
1932 -	179,092,950.51
1933 -	186,369,753.10
March 31st, 1935 -	207,610,523.67
1936 -	216,558,554.85

A more striking indication of the burden being carried by the motor vehicle owner in Ontario on present scale of fees and gasoline tax is shown by the following statement:

COMPARISON OF MOTOR VEHICLE REVENUE WITH ANNUAL COST COVERING TOTAL MAINTENANCE AND ADMINISTRATION DISBURSEMENTS BY PROVINCE, $4\frac{1}{2}\%$ INTEREST ON TOTAL PROVINCIAL HIGHWAY INVESTMENT AND PROVISION FOR SINKING FUND TO RETIRE INVESTMENT COST ON 3% PER ANNUM BASIS

	Year ending October 31st, 1932	Year ending October 31st, 1933	17 Mos. ending March 31st, 1935	Year ending March 31st, 1936	Year ending March 31st, 1937
Total Revenue from Registration Fees, Gasoline Tax, etc.	19,827,981.	20,214,561.	32,060,609.	24,283,830.	26,798,957.
Total Maintenance and Administration Expense	6,445,983.	4,650,134.	8,529,088.	6,610,955.	6,724,932.
$4\frac{1}{2}\%$ Interest on Debt outstanding at beginning of year .	7,319,801.	8,059,182.	11,881,071.	9,342,473.	9,745,135.
Sinking Fund Charge at 3% per annum to retire debt creating Investment . .	3,418,998.	3,764,355.	5,549,516.	4,363,765.	4,551,844.
Total Annual Costs	\$17,184,782.	\$16,473,671.	\$25,959,675.	\$20,317,193.	\$21,021,911.
Surplus	\$ 2,643,199.	\$ 3,740,890.	\$ 6,100,934.	\$ 3,966,637.	\$ 5,777,046.

This statement which covers the total Provincial expenditure on roads throughout the whole Province shows that the motor vehicle owner has paid to the Province over the past five year period:

1. The total amount paid by Province for Maintenance and Repair Costs,
2. $4\frac{1}{2}\%$ Interest on Total Provincial Highway Investment,
3. A Sinking Fund on 3% basis to retire debt created by Investment,
4. All Administration Expenses of Department,

and that over and above these charges, there is a surplus for the period of \$22,228,706.00.

Just at this point, it may be in order to deal with "The Provincial Government Funded Highway Debt" as it is called in "The Canada Year Book" in a table included in the section devoted to "Road Traffic - Transportation and Communications". As a matter of fact the "Public Accounts" of the Province of Ontario show no "Highway Debt" as such. The accounts, however, do include amongst the "Capital Assets" of the Province under the heading "Revenue Producing but not Realizable Assets - Roads and Highways" an investment at values already quoted in this report. These are the figures that have been used as the basis for the so-called "Highway Funded Debt". In view of the fact that in the Provincial accounts all revenue derived from Motor Vehicle owners in the way of Registration Fees, Gasoline, Tax, etc., has been credited to General Revenue Account, in the Provincial account, it is impossible to determine from the Public Accounts the true Highways Debt. It has been shown in this report that the Province has been repaid with interest all but \$30,159,605.00 of its expenditures of \$204,081,782.00 on Roads in Southern Ontario from 1920 to 1937 inclusive out of the revenue from the above sources in that District. It has also been shown in this report that over the past five years the total revenue received by the Province from motor vehicle owners has been sufficient to provide a surplus of \$22,228,706.00 after paying Highway Maintenance and Administration costs, interest on the total Provincial Highway Debt and a charge for sinking fund @ 3% which would retire the debt in thirty years. It is obvious, therefore, that the revenue received from the motor vehicle owner by the Province provided a substantial surplus over and above maintenance, administration and interest, which should have been and which no doubt was applied on the reduction of the Highway Debt.

Breed Report

We turn now to the Breed Report. This assumes to make a finding of investment in the highways of the province as of January 1, 1937, of the following:

Rural Roads	\$ 253,371,000.
Urban Streets	<u>103,446,000.</u>
Total	\$ 356,717,000,

These figures are arrived at in the case of rural roads as follows:

Total construction expenditures 1919 - 1936 inclusive (Page 22 Breed)	\$ 363,446,000.
Less amortization charges at 4% (Columns 3 & 4)	<u>110,175,000.</u>
	\$ 253,271,000.

In the case of urban streets the figure has been reached (P. 14) by an estimate based on alleged expenditures of 9 municipalities. Neither basic figures nor intermediate calculations are produced. The totals used are the following:

Total Construction Expenditures 1919 - 1936 inclusive (P. 25)	\$ 156,255,000.
Less assumed amortization charges at 4% (Cols. 3 & 4)	<u>52,809,000.</u>
	\$ 103,446,000.

It is obvious that figures arrived at in a speculative way can not be used by the Commission as a basis upon which to recommend the imposition of further burdens on motor highway users.

Professor Breed arrives at an annual cost of \$51,525,000 as of the year 1936. This total is reached as follows:

Interest at 4.55% on \$356,271,000 invest- ment cost:	\$ 16,231,000.
Amortization at 4% on \$356,271,000.	20,158,000.
Maintenance	11,569,000.
Taxes, 1% on \$356,271,000.	<u>3,567,000.</u>
Total	\$ 51,525,000.

Without admitting the correctness of Professor Breed's investment cost figure of \$356,271,000. we accept it for the purposes of the following calculation. Using this figure we find that the annual cost for 1936 would be \$31,684,117, made up as follows:

Interest on \$356,271,000 at 4% (this figure being 1% in excess of the rate at which the Province can borrow money at this time)	\$ 14,268,682.
Amortization at 4% on the depreciable items	7,290,635.
Maintenance figure as per Professor Breed \$11,569,000. corrected for error due to duplication	<u>10,124,800.</u>
Total	\$ 31,684,117.

It will be observed that Professor Breed proceeds on the theory that rights-of-way, sub-structure and pavement will be worn out and gone at the end of 25 years. This is not in keeping with highway experience and practice in the Dominion or in the United States; nor does it conform with the general practice of railways during the last 100 years.

The proper principle is to examine the assumed investment to determine what depreciates and what does not. We have found in

the Province of Ontario that 49% of the investment either does not depreciate or that losses are made good through current maintenance. Land, grading, signs, signals, fences, drainage systems, ditches, gravel on the shoulders, culverts, bridges in part, sodding, grassing and minor structures do not depreciate; or losses are made good through annual maintenance. This is also true for earth, gravel and broken stone pavement.

We have included in our annual cost a full depreciation charge for all paving surfaces excepting earth and gravel. In this particular instance we believe the 4% amortization rate used by both Professor Breed and ourselves is too high.

The next problem is the distribution of the annual cost to the different beneficiaries. Professor Breed has charged the whole annual cost to the motor users. This method of treatment is unique and we reject it. Current discussion recognizes at least three different categories of beneficiary, namely:

- (a) The community as such
- (b) Adjoining owners
- (c) Classes of user.

The limitation imposed on the Commission by the amendment made by Order-in-Council of the 28th April 1938 prevents a scientific inquiry into this matter in this province at this time. Such inquiry would call for the accumulation and analysis of a mass of statistical data and the consideration of a number of theories, each differing from the others in some important respect.

It is not proposed here to enlarge upon the subject; but the following notes are given to indicate the many matters which would come up for decision in such inquiry:

(a) The Community interest in Roads

The community interest in roads is of very great importance, which makes its determination a major task in itself.

"The road is one of the great fundamental institutions of mankind . . . It is the road that gives its framework to all economic developments. It is the road which is the channel of all trade and, what is more important, of all ideas . . . it is a sustenance without which organized society would be impossible."

(Belloc, Hilaire, the Road, 1924, p. Author's introduction.)

"Diminish the expense of carriage but one farthing, and you widen the circles, you form as it were a new creation, not only of stones and earth, and trees and plants, but of men also, and what is more, of industry and happiness."

(Ringwalt, J.L. Development of Transportation Systems in the United States, 1888, p.27)

"Good roads, canals, and navigable rivers, by diminishing the expense of carriage, put the remote parts of the country more nearly upon a level with those in the neighbourhood of the town. They are upon that account the greatest of all improvements."

(Smith, Adam, Inquiry into the Nature and Causes of the Wealth of Nations, 1782, p. 62)

It is obvious that the benefits of roads to society in general must be very great. These benefits include the influence on education, recreation, health, fire prevention, police protection, the national defence, the postal service, living and distribution costs. In general there are benefits to different groups of national character, such as agriculture, manufacture, labour, railroads, mining, forestry and waterways.

These benefits were recognized by the Premier of the Province in his Budget Speech of March 18, 1938 when he said:

"In my considered opinion there is not an investment that this great province can make in material things that will yield the returns by way of attracting tourists, by improving the living conditions of farms, by increasing the values of other farms, and by improving transportation facilities, as well as increasing the revenue of this province that will compare with the investment in modern highways."

It is clear that the share of the cost of roads to be contributed by the Community must be a most substantial one.

(b) Adjoining Owners

In addition to the community there are the adjoining owners.

It is universally recognized that transportation facilities benefit the property served. The law of the Province make the adjoining property owner liable for two classes of tax:

- (a) The general tax levied by a township or urban municipality. This tax is used in part to maintain existing roads in a state of repair.
- (b) Local improvement taxes. These are levied under The Local Improvement Act, R.S.O. 1937, C. 269.

The general policy of The Local Improvement Act is that where a local improvement is undertaken, the entire cost of the work "shall be specially assessed upon the lots abutting directly on the work, according to the extent of their respective frontages thereon, by an equal special rate per foot of such frontage sufficient to defray such cost" (ibid S. 20).

The Statute however provides that in certain cases the cost of a local improvement may be assessed in part on the abutting land, in part on other land benefitted, and in part to the Municipality (S. 31).

The Local Improvement Act tends to prevent over-construction of roads in real estate subdivisions by requiring adjoining owners to pay a portion of the improvements.

The Breed Report ignores the local law of the Province as to the cost of construction and maintenance of roads and streets which are not highways. It assesses against one class of highway beneficiary the whole cost of the roads and streets in the Province, urban and rural, Southern Ontario and Northern Ontario. It is obvious that such a distribution is fundamentally unsound.

No material is before the Commission which will justify the Commissioners in recommending the repeal of The Local Improvement Act; nor are the Commissioners in a position to determine what portion of the costs of public roads should be borne by the adjoining owners.

(c) Road Users

The next class of beneficiary is the user of the roads. There are many subdivisions of this class: pedestrians, bicyclists, horse-drawn vehicles, motor cars and trucks of various types; telegraph and telephone companies which string their wires along the right-of-way or, whose cable are carried under pavements; truck owners who are free to use all the roads of the province; and those whose right-of-way is restricted to a few miles.

It is obvious that no factual basis exists for the scientific determination by the Commission of the extent to which the cost of public roads should be met by the owners and operators of motor vehicles.

— . . —

Inquiries into the benefits which accrue to motor vehicle owners separate from all other beneficiaries have been conducted in other jurisdictions. Without knowledge of the underlying factors and the procedure followed the conclusions there reached can not be applied here.

However, for the sake of illustration we here make use of the conclusions reached by:

- (a) Mr. Joseph B. Eastman of the Interstate Commerce Commission, and
- (b) Dr. C. S. Duncan, the Economist of the American Association of Railways.

In his tentative report upon this subject Mr. Eastman distributes to motor vehicles the annual cost of different types of road as follows:

State highway systems	85%
County highway systems	33%
Township roads	33%
Urban streets	25%

(The Financing of Highways and Streets,
Pages 65, 75 and 81)

Dr. Duncan makes the following distribution:

State highways and other rural highways	82%
Urban streets	25%

(Duncan, Highway Competition, 1935, Page 8)

The application of these percentages to the total annual expense of \$31,684,117 gives the following result:

Class of Highway	Interest and Depreciation	Maintenance	Total Annual Expenses	Eastman		Duncan	
				%	Amount	%	Amount
King's	\$ 7,888,844.	\$ 2,739,086.	\$ 10,627,930.	85%	\$ 9,033,741.	82%	\$ 8,714,902
County	4,663,330.	2,068,230.	6,731,560.	33%	2,221,415.	"	5,519,879.
Township	1,149,064.	2,275,094.	3,424,158.	"	1,129,971.	"	2,807,809.
Northern Development	720,303.	232,390.	952,693.	"	314,389.	"	781,207.
Urban Streets	<u>7,137,776.</u>	<u>2,810,000.</u>	<u>9,947,776.</u>	<u>25%</u>	<u>2,486,944.</u>	<u>25%</u>	<u>2,486,944.</u>
	\$21,559,317.	\$10,124,800.	\$31,684,117.	47.93%	\$15,186,460.	64.10%	\$20,310,741.

The result of the application of the Eastman method is to charge to motorists an annual amount of \$15,186,460.

for the use of all roads and streets in the Province, urban and rural, in Northern and in Southern Ontario. The Duncan method produces an annual charge of \$20,310,741.00.

ALLOCATION OF MOTOR VEHICLE'S SHARE OF
ANNUAL HIGHWAY COST TO TYPES OF VEHICLES

To allocate that part of the annual highway cost which is to be paid by the motor vehicles as a class, some rational basis must be adopted. No generally accepted formula is available.

To date a large number of units have been employed as bases for the assessment of motor vehicle taxes. Among these are the number of assessible vehicles, vehicle mile, gross ton mile, weight of vehicle, gasoline consumption, and combinations of these units. As all of these are related to the service which the road provides, it is natural that their adaptability to equitable tax distribution should be considered. However no single one of these bases or units is acceptable as a sole measure of use or as a basis of taxation.

Equitable distribution of highway costs might be based upon the degree of benefits or the amount of service derived or received. An analysis of the highway installation leads to the conclusion that each element renders a particular service to the individual vehicle.

An illustration is the service rendered by a signal light at an intersection. The degree of service to the vehicle driver is the same regardless of whether the vehicle is an Austin, a model-T Ford, a Rolls Royce, a farm truck, or a truck and semi-trailer. Other elements, including the right-of-way, culverts and other drainage installations, snow fences, signs, fences, etc., fall into this same category.

In the case of rigid pavements it seems that the service rendered varies with the loads which pass over them. Thus, with the exception of vehicles equipped with solid tires, distribution of cost among vehicle classifications might be made in direct ratio with the tons carried.

Briefly summarizing, it can be stated that our study indicates that the annual expense of many of the elements furnishing service to motor vehicles can be distributed on the basis of vehicle miles while the remaining expense may be distributed upon the basis of ton miles.

Having determined by the Eastman or Duncan formula what part of \$31,684,117 is to be met by the motor users we have accordingly allocated these respective amounts to the various types of vehicles with the results shown on the following table:

Comparison of Motor Vehicle Taxes
(Gas & Registration) as Determined by Various
Methods of Allocation with that Paid

	Methods of Allocation		
	Eastman	Duncan	Current Taxes
Passenger Cars	\$ 21.32	\$ 28.75	\$ 25.10 to \$ 58.10
Taxicabs	76.12	103.11	-
Busses			
20 passengers and less	166.57	211.28	-
Over 20 passengers	223.93	279.87	-
Trailers less than 1 ton	6.71	9.23	8.48
Farm Trucks:			
2 tons or less	8.91	11.86	-
Private Trucks, Gross load			
Less than 2 ton	35.77	47.61	49.50
2 ton to 3 ton	44.70	58.30	73.38
2 ton to 4 ton	53.88	69.30	103.50
4 ton to 5 ton	62.88	80.09	127.16
5 ton to 6 ton	72.01	91.01	152.22
6 ton to 7 ton	80.95	101.70	172.50
7 ton to 8 ton	89.89	112.40	192.24
8 ton to 9 ton	98.14	123.09	225.36
9 ton to 10 ton	107.79	133.79	253.68

Principally, however, it was the results of this study

which have been the basis of the present report.

During the course of the study, it was found that the

results of the study were in general in accordance with

the results of previous studies.

The results of the study are presented in the following

tables, which are arranged in the order of increasing

complexity of the problems involved in the study.

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Problem	Results	Results	Results
1. Simple addition	100%	100%	100%
2. Simple subtraction	100%	100%	100%
3. Simple multiplication	100%	100%	100%
4. Simple division	100%	100%	100%
5. Simple word problems	100%	100%	100%
6. Simple fractions	100%	100%	100%
7. Simple decimals	100%	100%	100%
8. Simple percentages	100%	100%	100%
9. Simple geometry	100%	100%	100%
10. Simple algebra	100%	100%	100%
11. Simple trigonometry	100%	100%	100%
12. Simple calculus	100%	100%	100%
13. Simple statistics	100%	100%	100%
14. Simple probability	100%	100%	100%
15. Simple logic	100%	100%	100%
16. Simple philosophy	100%	100%	100%
17. Simple history	100%	100%	100%
18. Simple geography	100%	100%	100%
19. Simple science	100%	100%	100%
20. Simple literature	100%	100%	100%
21. Simple art	100%	100%	100%
22. Simple music	100%	100%	100%
23. Simple physical education	100%	100%	100%
24. Simple health	100%	100%	100%
25. Simple social studies	100%	100%	100%
26. Simple civics	100%	100%	100%
27. Simple government	100%	100%	100%
28. Simple economics	100%	100%	100%
29. Simple psychology	100%	100%	100%
30. Simple sociology	100%	100%	100%
31. Simple anthropology	100%	100%	100%
32. Simple linguistics	100%	100%	100%
33. Simple communication	100%	100%	100%
34. Simple information	100%	100%	100%
35. Simple technology	100%	100%	100%
36. Simple engineering	100%	100%	100%
37. Simple architecture	100%	100%	100%
38. Simple design	100%	100%	100%
39. Simple visual arts	100%	100%	100%
40. Simple performing arts	100%	100%	100%
41. Simple media	100%	100%	100%
42. Simple journalism	100%	100%	100%
43. Simple advertising	100%	100%	100%
44. Simple public relations	100%	100%	100%
45. Simple management	100%	100%	100%
46. Simple business	100%	100%	100%
47. Simple law	100%	100%	100%
48. Simple medicine	100%	100%	100%
49. Simple nursing	100%	100%	100%
50. Simple dentistry	100%	100%	100%
51. Simple pharmacy	100%	100%	100%
52. Simple veterinary	100%	100%	100%
53. Simple agriculture	100%	100%	100%
54. Simple forestry	100%	100%	100%
55. Simple fishing	100%	100%	100%
56. Simple hunting	100%	100%	100%
57. Simple gardening	100%	100%	100%
58. Simple home economics	100%	100%	100%
59. Simple family studies	100%	100%	100%
60. Simple human relations	100%	100%	100%
61. Simple interpersonal skills	100%	100%	100%
62. Simple conflict resolution	100%	100%	100%
63. Simple negotiation	100%	100%	100%
64. Simple leadership	100%	100%	100%
65. Simple team building	100%	100%	100%
66. Simple organizational behavior	100%	100%	100%
67. Simple management theory	100%	100%	100%
68. Simple business strategy	100%	100%	100%
69. Simple marketing	100%	100%	100%
70. Simple sales	100%	100%	100%
71. Simple customer service	100%	100%	100%
72. Simple quality management	100%	100%	100%
73. Simple continuous improvement	100%	100%	100%
74. Simple process management	100%	100%	100%
75. Simple supply chain management	100%	100%	100%
76. Simple logistics	100%	100%	100%
77. Simple inventory management	100%	100%	100%
78. Simple procurement	100%	100%	100%
79. Simple contract management	100%	100%	100%
80. Simple risk management	100%	100%	100%
81. Simple crisis management	100%	100%	100%
82. Simple disaster management	100%	100%	100%
83. Simple emergency management	100%	100%	100%
84. Simple public safety	100%	100%	100%
85. Simple law enforcement	100%	100%	100%
86. Simple corrections	100%	100%	100%
87. Simple juvenile justice	100%	100%	100%
88. Simple criminal justice	100%	100%	100%
89. Simple legal studies	100%	100%	100%
90. Simple jurisprudence	100%	100%	100%
91. Simple legal history	100%	100%	100%
92. Simple legal theory	100%	100%	100%
93. Simple legal practice	100%	100%	100%
94. Simple legal research	100%	100%	100%
95. Simple legal writing	100%	100%	100%
96. Simple legal analysis	100%	100%	100%
97. Simple legal reasoning	100%	100%	100%
98. Simple legal ethics	100%	100%	100%
99. Simple legal education	100%	100%	100%
100. Simple legal profession	100%	100%	100%

	Eastman	Duncan	Current Taxes
10 ton to 11 ton	\$ 116.73	\$ 144.49	\$ 283.26
11 " " 12 ton	125.67	155.18	313.64
12 " " 13 "	134.62	165.87	345.57
13 " " 14 "	143.56	176.58	378.36
14 " " 15 "	152.50	186.27	412.08
Private Trailers			
Gross load less than 2 ton	35.77	47.61	33.00
2 ton to 3 ton	44.70	58.30	49.34
3 " " 4 "	53.88	69.30	64.74
4 " " 5 "	62.88	80.09	85.02
5 " " 6 "	72.01	91.01	102.92
6 " " 7 "	80.95	101.70	116.38
7 " " 8 "	89.89	112.40	129.44
8 " " 9 "	98.84	123.09	150.18
9 " " 10 "	107.79	133.79	165.00
10 " " 11 "	116.73	144.49	195.96
11 " " 12 "	125.67	155.18	211.00
12 " " 13 "	134.62	165.87	225.99
13 " " 14 "	143.56	176.58	241.48
14 " " 15 "	152.50	186.27	256.50
Commercial Trucks			
Gross Load			
Less than 2 ton	53.79	71.59	70.68
2 ton to 3 ton	67.33	87.81	101.40
3 " " 4 ton	80.79	103.91	137.16
4 " " 5 "	94.56	120.43	163.88
5 " " 6 "	107.49	135.86	196.20
6 " " 7 "	120.85	151.83	221.28
7 " " 8 "	134.20	167.80	245.65
8 " " 9 "	147.55	183.77	283.26
9 " " 10 "	160.90	199.73	315.90
10 " " 11 "	174.25	215.70	349.68
11 " " 12 "	187.61	231.67	383.94
12 " " 13 "	200.96	247.63	419.76
13 " " 14 "	219.31	263.60	456.18
14 " " 15 "	227.66	279.57	494.58
Commercial Trailers			
Gross load			
less than 2 ton	53.79	71.59	45.48
2 ton to 3 ton	67.33	87.81	65.30
3 " " 4 "	80.79	103.91	84.48
4 " " 5 "	94.56	120.43	110.52
5 " " 6 "	107.49	135.86	129.24
6 " " 7 "	120.85	151.83	145.40
7 " " 8 "	134.20	167.80	162.78
8 " " 9 "	147.55	183.77	185.28
9 " " 10 "	160.90	199.73	201.84
10 " " 11 "	174.25	215.70	234.76
11 " " 12 "	187.61	231.67	252.78
12 " " 13 "	200.96	247.63	270.30
13 " " 14 "	214.31	263.60	288.24
14 " " 15 "	227.66	279.57	305.40

In the preparation of the table and the allocations of the sum to be paid by each motor vehicle, all passenger cars have been treated as a unit and the average annual taxes shown therefor. In actual practice certain passenger cars would pay more and certain others less than shown in the table.

The actual taxes shown in the foregoing table are for weight and gas taxes only. They represent the average for each type of vehicle.

It will be observed that the current tax for taxicabs, busses and farm trucks is not shown, for the reason that some difficulty was encountered in allocating and determining the annual tax paid by them. This omission, however, does not in any way affect the remaining parts of the table.

Attention is further called to the fact that the column of current taxes paid in the Province refers only to the vehicle with pneumatic tires. Vehicles with solid tires should have an increase in the weight tax in order to compensate for the additional destruction to the road for which these vehicles are responsible.

The conclusion from the calculations given above is that even on the Breed figures of inventory and maintenance the motor highway users of the Province are paying very substantially more than they should be charged.

The Basic Highway

One of the devices developed in the Breed Report for the purpose of establishing a basis for the distribution of the annual costs of rigid surfaced highways among the various classes of motor vehicles, is the so-called "Basic Highway".

From certain formulae it is computed that a passenger vehicle can theoretically be supported upon a concrete slab thickness of $2\frac{1}{2}$ inches or a little less. Since all motor vehicles are of this weight class or heavier, the cost of a pavement of this thickness would be shared equally among all. The next heavier group of vehicles requires a somewhat greater thickness of pavement. The cost of this added thickness of concrete would be added to the basic cost above and charged to this group and also to all heavier vehicles. The process is continued throughout the entire range of vehicle weight classes.

Among the formula used for determining the minimum thickness for the basic highway is the one developed by Mr. Clifford Older called the Corner formula. It gives no consideration to any factor other than that of a standing load.

The Westergaard formula does introduce to some degree the element of subgrade support. However, the shrinking and swelling of the natural earth foundation under the wide range of climatic conditions which prevail especially in our northern area introduces variations in pavement support and actual stresses, cannot, in the light of present knowledge, be evaluated.

In view of these climatic factors we are certain that no highway department would construct a concrete pavement of "Basic Highway" dimensions, even though to be used for purely passenger car vehicles. The same statement holds true for greater weights of vehicles up to some magnitude of load which requires a thickness at least equal to that necessitated by climatic and subgrade factors.

What this limit is must be determined by competent authorities in any region. In the northern belt of the United States it is probable that prevailing thickness would continue to be specified were heavier vehicles entirely removed from the road.

This belief is supported by the results of a questionnaire sent to all State Highway Departments by the Highway Department of the State of Washington. Of thirty-nine replies to the questionnaire, twenty-nine gave their views on the matter of pavement thickness. Thirteen stated that they would reduce the thickness were passenger cars only to be accommodated; however, none would reduce nearly to the extent dictated by the "Basic Highway" conception. Sixteen stated that they would not reduce the thickness.

Thus climate and subgrade must be regarded as paramount considerations in the determination of pavement thickness at least for roads which will be subjected to loads in weight categories close to, if not actually including, the maximum which are permitted to operate.

Thus, the "Basic Highway", predicated primarily on loads as a medium of tax assessment must be discarded. Its inadequacy as well as the whole complicated question is well expressed by Committee IX - Highways, of the American Railway Engineering Association, as follows:

"In so far as weights of vehicles in their relation to the strength of pavements are concerned, there is ample evidence that heavy loads destroy pavements more rapidly than light ones, but to express this fact in quantitative terms is fraught with marked difficulties. Much has been written on this subject, by men possessed of a broad experience in highway design and construction and who have been able to give their undivided time to a study of the subject. However, regardless of this, there is a total lack of agreement among these authorities. This may be explained in large part by the complexity of the problem, which is comparable with that of determining definitely how much stronger track must be for an E-75 locomotive than for an E-50 engine, something that railway engineers have not completed. It is

explained also by the fact that the authors of these reports are rather obviously in the position of the advocate of one side of this controversy or the other.

"As a consequence, any effort to arrive at reliable conclusions will require the undivided efforts of a staff of qualified engineers who are afforded ample time to assemble, co-ordinate and weigh all the available data on this subject. It is the opinion of the Committee, also, that such investigations will disclose such a wide variety of conflicting variables that only rather general conclusions will be forthcoming." (A.R.E.A. Bulletin. Vol. 37, 1936, Feb. p. 589)

From the standpoint of width the 16 feet specified by the "Basic Highway" is grossly inadequate. It is physically possible to drive a passenger car in an 8-foot lane. But to expect that it can be done safely at the present high speeds and diversities of traffic, with the varying climatic conditions, topography, curvatures, and sight distances, is to place unjustified confidence in the skill and general reliability of the millions of drivers who use the highways.

Referring again to the Washington questionnaire, thirty-nine states replied to a question on width. Only three had standard widths of 18 feet or less. Not one stated that it would reduce its standard if called upon to design a "Basic Highway".

From analysis of conditions which control standards of design it appears evident that the "Basic Highway" is an imaginary conception quite unrelated to practical considerations. As such it should have no application to the allocation of highway costs.

Middle Road.

In another way it can be demonstrated that the motorists of the Province are paying more than they should be called upon to pay of the costs of public roads.

In his Budget Speech of March 19, 1938 the Premier of the Province said that the Middle Road from Toronto to Hamilton, a distance of 34 miles had cost \$3,600,000 or approximately \$100,000 a mile and that this road would probably bring \$2,000,000 of gasoline tax revenue next year. It is obvious that the motorists are entitled to a reduction in taxation.

Payments by 6 P.C.V. Operators

The same conclusion is reached from another angle. The construction and maintenance costs for the portion of No. 2 Highway from Toronto to Oshawa from the year 1917 to 1937 inclusive are as follows:

Construction	\$ 2,885,183.91
Maintenance	345,859.74 or
approximately	17,000.00 a year.

Some 34 Class A operators are licensed to run over No. 2 Highway from Toronto to Oshawa. In the year 1937 six of these licensees paid to the Ontario Government for gasoline tax, commercial marker and P.C.V. fees in respect of trucks operating over this portion of Highway No. 2 a sum in excess of \$15,000. That is to say six operators paid within \$2,000 a year of the average annual maintenance cost.

In addition to revenue from these and other P.C.V. operators the Government received gasoline tax and fees to an amount far in excess of the average annual maintenance cost from some hundreds of owners of private trucks and some thousands of owners of commercial cars and passenger vehicles of an amount far in excess of the maintenance cost.

RECOMMENDATIONS

1. Reduction of Taxes of Motor Highway Users.

It is submitted that the evidence is conclusive that motor vehicle owners and operators are not merely paying the full cost of public roads of the Province; but that they are overpaying it by a large sum each year.

It is of the first importance that transportation costs be reduced to the minimum. This is sound political economy, and universally recognized as such. Every reduction in cost of transportation makes new transactions in trade and in industry possible; thus increasing employment and advancing prosperity. High transportation costs cause high cost of living within the country; and reduced sales abroad.

Common carriers on the roads of Ontario are the most heavily taxed of all road operators in the Province. In 1936 the tax accruals of the Canadian National Railways and Canadian Pacific Railway totalled \$8,319,000 or approximately 3% of their gross operating revenue (Ex. 117); while common carriers on the highways of the Province paid in the same year approximately 3% of their gross receipts in general taxes and 7% in special highway taxes or a total of 10%.

The common carrier on the highways is discriminated against in another respect. He is limited to the use of certain roads only of the Province; and yet he pays a heavy license fee which the owner of the private truck, who may use all the roads of the Province, does not pay. Their tonnage may be the same and their mileage the same; yet the common carrier who is servicing the smaller type of business and community is the more heavily taxed.

This situation should be equalized. It can be equalized in one of two ways; either by reducing or by increasing taxation. In view of the fact that motor owners as a whole are paying more

than the whole cost of the roads. The first step in reducing taxation should be in the abolition or the substantial reduction of P.C.V. fees.

License fees are imposed to provide for the costs of administration incidental to the licensing system. They should not be imposed for prohibitory purposes. The fees originally imposed may have been appropriate; but as the traffic has grown they have rendered such large revenue as to become inappropriate as appears from the following figures:

Moneys Received by the Province for
Marker and P.C.V. Fees in the Years
1932 to 1937 inclusive

(Answers to Question 45)

1932	\$ 7,376,672.73
1933	7,421,159.84
1935 (17 months)	14,188,521.12
1936	9,144,264.77
1937	<u>10,916,491.08</u>
Total	\$ 49,047,109.54

The cost of administration for the same period was as follows:

1932	\$ 656,970.73
1933	604,564.93
1935 (17 months)	979,709.99
1936	895,575.16
1937	<u>920,347.35</u>
Total	\$4,057,168.16.

A substantial reduction in fees is called for.

John S. Worley,

E. J. Howson.

June 11, 1938.

This deputation, appointed by the Council of the Corporation of the City of Brantford would first like to express its appreciation of the opportunity you have afforded us to appear before you today.

We believe that from the many briefs to be presented to you will make a report to the Government which will help to clarify the present perplexing problem of transportation which exists within this Province. It has been felt for some time that more regulation of the various forms of transportation has been necessary and that the whole subject of taxation for highway costs has been due for revision.

It is our intention to deal mainly with the question of highway costs particularly as they affect the general taxpayer. We feel that more than a fair share of the costs are at present being raised from this source and that a greater share should be placed upon those using the highways, particularly those using them for commercial gain.

We would particularly draw your attention to the matter of connecting links between highways entering and leaving the municipalities. In the City of Brantford these represent an investment of \$253,000.00. This amount is being paid off at the rate of 4%, an annual cost of some \$18,600.00 for twenty years in addition to an annual cost of \$3,000.00 for maintenance. Each year we are required to budget \$21,600.00 for this item alone. This is without regard to future replacements, possible increases in maintenance costs.

It is our considered opinion that owners of property abutting main City streets which are in effect parts of the highways system should not be charged with their costs as they are at present, neither should the general taxpayer of the municipalities be called upon to provide the solid roads required to take care of the heavy traffic passing through the cities.

A case in point is that of a partially disabled Great War Veteran. By dint of thrift and by denying himself and his family of many of the necessities of life, he purchased a small home on St Pauls Avenue which is a connecting link between highways 24 and 2. At the time of his purchase there was an ordinary city street with a treated surface passing his property. With the paving of highway 24 from Brantford to Galt there was a decided increase in traffic through this district and it

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and Dr. & Professor Jackson

was found necessary to replace the surface with a solid cement strip. The City of Brantford, in order to pay for this work made the usual assessments against the property holders on that street and this man was levied an annual tax of nearly \$13.00 payable for ten years. The total tax represents almost 10% of the original cost of this man's home which is definitely an injustice to him, particularly as his disability will not permit him earning sufficient income to operate a motor vehicle. His tax is in effect, a subsidy in favour of those using the highway. There is a growing demand that these costs should be paid by the Provincial fund which secures its revenue from motor vehicle licenses and gasoline tax, a great deal of which is raised in the cities from vehicles operating entirely within the confines of the city limits on roads again paid for by local taxpayers.

We are aware of one particular instance in this connection where a local company operates eight motor trucks entirely within the City limits and many other cases of a similar nature could be cited. The nature of their license prohibits them using the highways, yet they pay annually \$480.00 in Provincial licenses and some \$500.00 in gasoline tax. This can be multiplied by the large number of vehicles operating under similar circumstances.

Also, it is anticipated that the City of Brantford will replace the present street car system in favour of busses which will also be used exclusively within the City limits and that a large sum will be paid annually for gasoline tax in this connection.

We therefore urge this commission to consider this feature in their findings, and recommend that the municipality involved be recompensed by the Provincial Government fixed percentage of the gasoline tax collected under these conditions. We would further suggest that the extra expense involved by the Provincial

Government be raised by a direct tax upon those for whose conveniences the highways and connecting links are provided.

In connection with the method of taxation for highway purposes we would suggest that the present method is inequitable and should be abandoned in favour of the "per ton mile" method. It is upon this system the railroads, after their years of experience base their costs and rates, appreciating that the gross ton mile use of their right of way is the largest contributing factor to costs. We claim that the present system is inequitable in view of the following figures covering the operation of a motor truck as compared with a passenger automobile over a similar distance.

Vehicle.	Weight.	Distance.	Per ton miles	Miles per Gallon.	Gasoline used.	Tax at 6¢	Cost per ton mile.
Truck.	6 tons	50 miles	300	8 $\frac{1}{4}$	6 gals.	36	.012¢
Passenger car.	1 $\frac{1}{2}$	50 miles	75	18	2 $\frac{3}{4}$ Gals.	16 $\frac{1}{2}$ ¢	.022¢

We would further submit that the best interests of the taxpayer would be served by a system of budgeting for highway costs annually and that those enjoying the use of the network of highways in this Province be assessed annually a sum equal to the amount required for that period due consideration being given to the report of the Salter commission on highway transportation of Great Britain which ruled that the taxpayers share should be 12% of the total cost and 88% should be raised by vehicle taxation.

We have intentionally refrained from making submission on questions of standardization of rates for freight and passengers carried on the highways, the organization of a board similar to the Board of Railway Commissioners to enforce publishing of tariffs by highway carriers, safety regulations, restrictions of loads and type of equipment used, and other phases of the transportation problem upon which you will report. We believe that other bodies will deal adequately with these matters and have confined our brief to taxation only, confident

that the whole question of transportation cannot be fully dealt with without the subject matter of our brief receiving a prominent place in your findings.

We therefore recommend that due consideration be given to the following points:

That Owners of property abutting connecting links within the boundaries of municipalities should be relieved of the tax presently levied against them for the construction and maintenance of such roads.

That the Provincial Government should assume the cost of construction and maintenance of connecting links within the municipalities.

That gasoline tax collected from vehicles operating exclusively within the boundaries of municipalities should be returned to the municipality.

That the per ton mile method of taxation be adopted.

That a method of budgeting for highway costs be adopted and the sum required annually to take care of the whole cost be against the various forms of transportation using the highways, due consideration being given to the community share which is 12% and to be collected by the Province.

